

REMARKS

The application included claims 1-14 prior to entering this amendment.

The examiner rejected claim 1-14 under 35 U.S.C. § 103(a) as being unpatentable over Inoue, et al. (U.S. Patent No. 5,781,311).

The applicant amends claims 1-7 and 9-14.

The applicant adds new claims 15-30.

The application remains with claims 1-30 after entering this amendment.

The applicant adds no new matter and request reconsideration in view of the following remarks. The applicant points out that the claimed subject matter may be patentably distinguished from the cited reference(s) for multiple reasons; however, the following remarks are believed to be sufficient. Likewise, it is noted that the applicant's failure to comment directly on any of the positions asserted by the examiner in the office action does not indicate agreement or acquiescence with those asserted positions.

Claim Rejections Under § 103

The examiner rejected claim 1-14 as being unpatentable over Inoue. The applicant traverses the rejection for the reasons that follow.

Claim 1 recites (emphasis added):

using an optical scan module of the flatbed scanner to scan the original document plane to read and obtain the distribution range of the plane light source;
and

using the optical scan module to scan the region covered by the distribution range to extract an image of the transparent document.

Claim 8 recites (emphasis added):

using the optical scan module to scan the original document plane once to read the distribution range, so as to capture the scanning position.

The examiner asserts:

Inoue by using the optical scan module (9) scans the original document plane once (col. 4, lines 44-45). Inoue discloses that shading measurement is performed on window 4 (fig. 1). This indicates that the whole region covered by the light distribution range is pre-scanned (col. 4, lines 44-56).

Inoue further discloses that “next” the optical scan module (9) scans the region covered by the distribution range only to extract an image of the transparent document (20, col. 4 lines 52-67).¹

Respectfully, the above interpretation incorrectly construes the teachings of Inoue. Inoue does not teach or suggest that an optical scan module “scan the original document plane to read and obtain the distribution range of the plane light source” as recited in the applicant’s claim 1 (with a similar element in claim 8). To the contrary, Inoue’s shading measurement is not a scan of a document plane, and is merely a measurement *at one linear location* of the document plane. Inoue teaches (emphasis added):

The lighting level is the same at all positions in planar light source 3 on a straight line in the auxiliary scanning direction A. As noted above, the lighting level of the illuminating light and the level of the CCD pixels determines the output of shading measurements. With the above configuration, whether shading measurements are performed within the original reading region 4E or within shading window 4C, the result is the same. Hence, accurate shading correction is possible at any location within original reading region 4E when the correction is based on the results of shading measurements in shading window 4C. Accordingly, at least the conventional device problem of shading correction depending on the position in the auxiliary scanning direction A causing insufficient correction is solved.²

As explained in the passage above, and with reference to Inoue’s Fig. 1, Inoue’s shading measurement is performed at one fixed position and is not a scan of a document plane. Inoue’s shading measurement is disclosed to provide correction values for variations in lighting perpendicular to Inoue’s auxiliary scanning direction, since Inoue’s fluorescent tubes are oriented in the auxiliary scanning direction. This appears to be why a single shading measurement is sufficient in Inoue’s teachings, as light of the fluorescent tubes is relatively constant in Inoue’s auxiliary scanning direction and only varies in the direction of Inoue’s CCD line sensor (perpendicular to the auxiliary scanning direction).

The applicant points out that there is no movement of Inoue’s CCD line sensor disclosed with respect to Inoue’s shading measurements, but there is movement disclosed with respect to Inoue’s “reading the images on transparent original 20.”³ This also establishes that Inoue’s shading measurement is a measurement at a single location and is not a scan of a document plane.

The applicant further points out that Inoue does not teach or suggest reading or obtaining a “distribution range of the plane light source” as recited in claim 1 (with a similar element in claim 8). Instead, Inoue teaches:

¹ Office Action, pages 2-3.

² Inoue, col. 4, lines 13-27.

³ Inoue, col. 4, lines 62-63.

The image reading operation of image reading device 1 is described with reference to FIG. 6. Transparent original 20 is placed in transparent original reading region 4E and held in place by being interposed between platen glass 13 and light source protecting glass 17.⁴

That is, Inoue's teachings require a fixed region for reading, and do not "read and obtain the distribution range of the plane light source" and then "scan the region covered by the distribution range to extract an image of the transparent document" (as recited in claim 1) or "capture the scanning position" (as recited in claim 8). Further, Inoue does not teach or suggest a scan of the document plane separate from the scan that "reads the images on transparent original 20."⁵

Accordingly, as the cited reference does not teach or suggest all of the elements of either of claims 1 or 8, claims 1 and 8 are in condition for the examiner's allowance for at least this reason.

As dependent claims 2-7 and 9-14 incorporate all of the elements of their respective independent claim, and as the independent claims are allowable per the remarks above, dependent claims 2-7 and 9-14 are also in condition for the examiner's allowance for at least this reason.

New Claims

The applicant adds new claims 15-30.

New independent claim 21 recites:

*an original document plane;
an optical scan module; and
where the optical scan module is enabled to scan a transparent document by first performing a preview scan of the original document plane to obtain a distribution coverage of a plane light source, and subsequently performing a scan of a region within the distribution coverage of the plane light source to extract the image of the transparent document.*

New independent claim 21 includes similar elements as independent claims 1 or 8. As independent claims 1 and 8 are allowable per the remarks above, independent claim 21 is also in condition for the examiner's allowance for at least this reason.

⁴ Inoue, col. 4, lines 36-40.

⁵ Inoue, col. 4, lines 62-63.

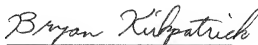
New claims 15-17 are dependent on independent claim 1, new claims 18-20 are dependent on independent claim 8, and new claims 22-30 are dependent on independent claim 21. As independent claims 1, 8 and 21 are allowable per the remarks above, dependent claims 15-17, 18-20, and 22-30 are also in condition for the examiner's allowance for at least this reason.

Conclusion

For the foregoing reasons, the applicants request reconsideration and allowance of the remaining claims. The applicants encourage the examiner to telephone the undersigned at (503) 224-2170 if it appears that an interview would be helpful in advancing the case.

Respectfully submitted,

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A handwritten signature in cursive script that reads "Bryan Kirkpatrick". The signature is written in dark ink and is positioned above a horizontal line.

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